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DIRECTOR OF PUBLIC WORKS

## COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS

## STANDARD SANITARY SEWER MANHOLE NOTES

DATE: JULY, 2005 | NTS | PLATE **U-10.2** 

## NOTES:

- 1. TWO FLEX JOINTS REQUIRED FOR VCP. ONLY ONE FLEX JOINT REQUIRED FOR PVC & DIP.
- 2. ON PRE-CAST MANHOLE BASES, THE BUILT IN JOINT CAN BE USED FOR THE FIRST FLEX JOINT.
- 3. ALL MANHOLE BARRELS AND CONES SHALL BE ASTM C-478.
- 4. FOR MANHOLES LARGER THAN 48" IN DIAMETER, ADDITIONAL REDUCING CONE SECTIONS ARE REQUIRED.
- 5. NEW CHANNELS IN THE MANHOLE BASES SHALL BE CONSTRUCTED IN THE FIELD USING NON-SHRINK GROUT AND THE FOLLOWING REQUIREMENTS AT A MINIMUM:
  - A. CHANNEL SURFACES SHALL BE FINISHED WITH A SMOOTH FINISH AND BLEND INTO THE EXISTING BASE IN A MANNER ACCEPTABLE TO THE ENGINEER.
  - B. THE EXISTING MANHOLE BASE SHALL BE BUSH—HAMMERED IN THE AREA OF THE NEW CHANNELS PRIOR TO THE CONSTRUCTION OF THE CHANNELS.
  - C. A CONCRETE BONDING AGENT SHALL BE USED IN THE AREA OF THE NEW CHANNELS TO ENSURE PROPER BONDING BETWEEN THE NEW NON-SHRINK GROUT CHANNELS AND THE EXISTING BASE.
  - D. CONTRACTOR SHALL SUBMIT SPECIFICATION SHEETS FOR REVIEW AND APPROVAL BY THE ENGINEER FOR ALL MATERIALS TO BE USED IN THE CONSTRUCTION OF THIS SPECIFIC CHANNEL. ALL SUBMITTALS MUST BE SUBMITTED THROUGH THE PROJECT DESIGN ENGINEER.
- 6. BACKFILL MATERIAL AROUND SEWER MANHOLES AND OTHER SANITARY SEWER STRUCTURES THAT MUST REMAIN
  WATERTIGHT SHALL BE COMPACTED WITH RAMMER COMPACTORS ("WHACKER" TYPE). HEAVY EQUIPMENT SHALL NOT BE
  USED TO COMPACT AROUND THESE STRUCTURES UNLESS SPECIFICALLY APPROVED BY THE ENGINEER IN WRITING.
  BACKFILL SHALL BE PLACED UNIFORMLY AROUND THE CIRCUMFERENCE OF THE STRUCTURE IN 8—INCH LIFTS.
- 7. PRIOR TO INSTALLATION OF ANY SANITARY SEWER FACILITIES THE CONTRACTOR SHALL PROVIDE TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL MATERIAL SUBMITTALS FOR THE COMPONENTS VERIFYING THAT THEY MEET PLACER COUNTY REQUIREMENTS AND SPECIFIC PROJECT REQUIREMENTS. THE MATERIAL SUBMITTALS SHALL INCLUDE, BUT NOT BE LIMITED TO, MANHOLES, PIPING, LIFT STATION COMPONENTS, UNDERGROUND STORAGE TANKS AND APPURTENANCES, ETC. THEY SHALL PROPERLY IDENTIFY WHICH FACILITY THE ITEM PERTAINS TO ON THE PROJECT PLANS (E.G. MANHOLE BY STATION AND NUMBER) AND SHALL INCLUDE SHOP DRAWINGS AS REQUIRED (E.G. FROM THE PRECAST MANUFACTURER FOR ALL PRECAST MANHOLE BASES). AFTER DESIGN ENGINEER REVIEW AND APPROVAL OF THE SUBMITTALS A COPY SHALL BE SENT TO THE ENGINEER FOR FINAL REVIEW AND ACCEPTANCE. ONCE ACCEPTED, COPIES SHALL BE RETURNED TO THE CONTRACTOR. THE CONTRACTOR SHALL NOT START INSTALLATION OF THE APPLICABLE SANITARY SEWER FACILITIES UNTIL THE COUNTY INSPECTOR HAS VERIFIED ALL COMPONENTS DELIVERED TO THE PROJECT SITE CONFORM TO THE APPROVED MATERIAL SUBMITTALS.
- 8. PRECAST MANHOLE BASES WILL BE ALLOWED ONLY WHEN THE HORIZONTAL ALIGNMENT OF A SEWER LINE AT THE MANHOLE EXACTLY MATCHES THE PRECAST BASE WITHIN A TOLERANCE OF  $\pm 4$  DEGREES.